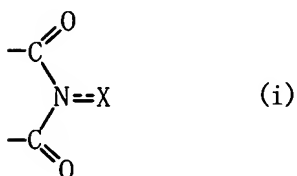


CLAIMS

1. A method for producing an aromatic carboxylic acid, by oxidizing an aromatic compound B with oxygen in the presence of a catalytic nitrogen-containing cyclic compound A to thereby yield a corresponding aromatic carboxylic acid, the aromatic compound B having one or more hydrocarbon groups alone as substituents on its aromatic ring, and the catalytic nitrogen-containing cyclic compound A having a skeleton represented by following Formula (i):



wherein X represents oxygen atom or an -OR group, and wherein R represents hydrogen atom or a hydroxyl-protecting group,

as a constitutive member of its ring, the method comprising the step of carrying out a reaction at a concentration of the aromatic compound B in the reaction system of 3.0 percent by weight or less, while continuously feeding the catalytic nitrogen-containing cyclic compound A, the aromatic compound B, a reaction solvent, and oxygen to a reactor and continuously extracting a reaction mixture from the reactor.

2. The method for producing an aromatic carboxylic acid according to claim 1, wherein the reaction is carried out at a molar ratio of the catalytic nitrogen-containing cyclic compound A to the aromatic compound B in the reaction system of 0.01 or more.

3. The method for producing an aromatic carboxylic acid according to one of claims 1 and 2, wherein the reaction is carried out at a reaction temperature of 150°C or higher.

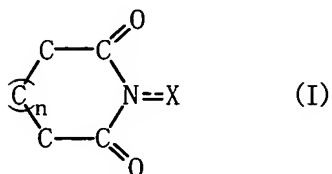
4. The method for producing an aromatic carboxylic acid according to any one of claims 1 to 3, wherein the reaction is carried out at an oxygen concentration in an offgas of 1% to 8%.

5. The method for producing an aromatic carboxylic acid according to any one of claims 1 to 4, wherein the reaction is carried out at a residence time of 0.5 to 4 hours.

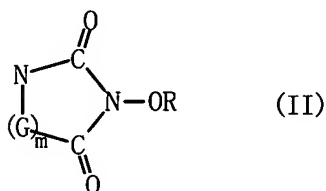
6. The method for producing an aromatic carboxylic acid according to any one of claims 1 to 5, wherein the reaction is continuously carried out using plural reactors arranged in series at a concentration of the aromatic compound B in the reaction system at least in the downstreammost reactor of 3.0 percent by weight or less.

7. The method for producing an aromatic carboxylic acid according to claim 1, wherein the catalytic nitrogen-containing cyclic compound A comprises a cyclic imide compound having a cyclic imide skeleton represented by

following Formula (I):



wherein "n" denotes 0 or 1; and X represents oxygen atom or an -OR group, wherein R represents hydrogen atom or a hydroxyl-protecting group, or a cyclic acylurea compound having a cyclic acylurea skeleton represented by following Formula (II):



wherein "m" denotes 1 or 2; G represents carbon atom or nitrogen atom, wherein when m is 2, two Gs may be the same as or different from each other; and R is as defined above.

8. The method for producing an aromatic carboxylic acid according to any one of claims 1 to 7, further comprising using a metallic compound as a promoter.

9. The method for producing an aromatic carboxylic acid according to claim 8, wherein the metallic compound is at least one compound selected from the group consisting of cobalt compounds and manganese compounds.

10. The method for producing an aromatic carboxylic acid

according to one of claims 8 and 9, wherein the amount of the metallic compound is 0.001 to 10 moles per 1 mole of the catalytic nitrogen-containing cyclic compound A.